

From: helen ward [REDACTED]

Sent: Monday, 9 September 2019 12:38 PM

To: [REDACTED]

Subject: Northconnex

Dear [REDACTED],

I am writing regarding the Northconnex tunnel and RMS's recent request to increase the VOC (Volatile Organic Compound) ventilation outlet limit by 400% from 1mg/m (cubed) to 4mg/m (cubed), due to an apparent 'transcription' error.

Such a massive 4 fold increase in already high pollution levels would be detrimental to the health of the both toll paying commuters using the tunnel and of those people living/ schooling and working in the vicinity of the unfiltered stacks.

Many VOCs are proven to be carcinogenic.

Already the EIS statement for this project documents very high in tunnel levels of particulate matter, nitrogen dioxide and other pollutants (which are all proven to be seriously detrimental to human health).

There are grave concerns from multiple health specialists and organisations about the negative health impacts of road tunnels and unfiltered stacks.

The recent Parliamentary Enquiry into huge Westconnex recommended filtration of all existing and future road tunnels due to concerns relating to short term and long term health impacts.

Since my original submission to the EIS for Northconnex in 2014, there has been an exponential increase in further evidence of air pollution causing early deaths and illness from cardio respiratory disease (heart attacks, strokes, chronic lung disease, cancers including lung cancer and bladder cancer (in particular relating to diesel exhaust), causing permanently reduced lung volumes in children, strong association to low birth weight babies, premature labour in pregnant women, and links to dementia and autism.

There are no other tunnels of this length in the world with a design including longitudinal in tunnel ventilation without filtration and with their pollution stacks placed in densely populated residential and educational areas.

Tunnels in Europe and Japan either have filtration, ban diesel heavy vehicles and have stacks in non residential (often mountainous) areas. If they are longer in length, they have transverse in tunnel Ventilation with filtration to allow for better in tunnel air quality also.

Gold standard design of tunnels and best practise in developed countries is to install filtration systems in urban tunnels or to place ventilation stacks away from sensitive receptors, such as children. This was eluded to in the 2009 NHMRC Road tunnel paper.

These new Sydney tunnels are designed to carry a large numbers of trucks, the overall diesel particle emissions would be significantly greater than in any previous tunnel project in Australia and hence there is no true data to benchmark.

There is NO safe level of exposure to air pollution and developed countries around the world (in Europe and USA for example) are working hard to reduce traffic induced air pollution.

Allowing a 400% increase in already high levels of VOC would be damaging to human health.

Approving a 4-fold increased allowance limit must be accompanied by full supporting and referenced scientific data which I suggest will be almost impossible to find.

Without evidence based decision making, I seriously question the validity and integrity of the project's EIS process.

Once again, I urge respect for the precautionary principle and to place human health as a top priority. There is no proof these levels of pollution (VOC and Particulate matter) are safe.

As a medical specialist "first do no harm" is a phrase that is well known to myself and my colleagues, and should also be extended to public health.

Yours sincerely,

Dr Helen Ward

B Med Sci BM BS FANZCA

Specialist Anaesthetist

Helen